

03500.014806.1

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	)	
	:	Prior Examiner: A. Diamond
Tohru DEN, et al.	)	
	:	Prior Group Art Unit: 1753
Application No.: Unassigned (Divisional	)	
of Appln. No. 09/665,983,	:	
filed September 20, 2000)	)	
	:	
Filed: September 17, 2003	)	
(filed concurrently herewith)	:	
	)	
For: PHOTOELECTRIC CONVERSION	:	September 17, 2003
DEVICE AND METHOD OF	)	
PRODUCTION THEREOF	:	

Mail Stop Patent Application  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

In compliance with the duty of disclosure under 37 C.F.R. §1.56 and in accordance with the practice under 37 C.F.R. §§1.97 and 1.98, the Examiner's attention is directed to the documents listed on the enclosed Form PTO-1449.

U.S. Application Nos. 09/178,442 and 09/956,021, which were cited in parent Application No. 09/665,983, issued as U.S. Patent Nos. 6,525,461 and 6,596,078, respectively. Copies of these U.S. patents are not enclosed, since the Patent Office has

waived the requirement under 37 C.F.R. §1.98(a)(2)(I) for submitting a copy of each cited U.S. patent for applications filed after June 30, 2003.

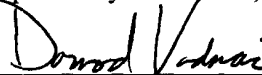
All of the remaining documents listed on the Form PTO-1449 were cited in the parent Application No. 09/665,983. The Examiner is respectfully directed to the Patent and Trademark Office files for review of these documents. See MPEP §609.

With regard to the article "Metal, (Feb. 1991) 89-93," the Examiner drew a line through this citation on the Form PTO-1449 in the parent case. Applicants respectfully request consideration of this reference.

It is respectfully requested that the above information be considered by the Examiner and that a copy of the enclosed Form PTO-1449 be returned with the next communication from the Office, indicating that such information has been considered.

Applicants' undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 530-1010. All correspondence should continue to be directed to our below-listed address.

Respectfully submitted,



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FORM PTO 1449 (modified)  U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE  LIST OF REFERENCES CITED BY APPLICANT(S) (Use several sheets if necessary)			ATTY DOCKET NO. <b>03500.014806.1</b>		APPLICATION NO. <b>Unassigned (Divisional of Appln. 09/665,983, filed September 20, 2000)</b>		
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			FILING DATE <b>September 17, 2003</b>			GROUP <b>1753</b>	
U.S. PATENT DOCUMENTS							
*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
		4,927,721	05/1990	Gratzel, et al.			
		5,362,514	11/1994	Flatz, et al.			
		5,441,827	08/1995	Gratzel, et al.			
		5,885,368	03/1999	Lupo, et al.			
		6,043,428	03/2000	Han, et al.			
		6,133,061	10/2000	Sonoda			
		5,171,480	12/1992	Yoshinaka, et al.			
		5,350,644	09/1994	Graetzel, et al.			
		4,155,781	05/1979	Diepers			
		5,454,880	10/1995	Sariciftci, et al.			
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		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES/NO/ OR ABSTRACT
		9-237641	09/1997	Japan			
		10-112337	04/1998	Japan			
		WO 91/16719 A2	10/1991	PCT			
		1087446 A2	03/2001	Europe			
		0364597	04/1990	Europe			
		2000-203998 A	07/2000	Japan			
OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)							
		<b>M.K. Nazeeruddin, et al., "Conversion of Light to Electricity by cis-X<sub>2</sub>Bis(2,2'-bipyridyl-4,4'-dicarboxylate)ruthenium(II) Charge-Transfer Sensitizers (X=Cl<sup>-</sup>, Br<sup>-</sup>, I<sup>-</sup>, CN<sup>-</sup>, and SCN<sup>-</sup>) on Nanocrystalline TiO<sub>2</sub> Electrodes," J. Am. Chem. Soc., vol. 115, no. 14, pp. 6382-6390 (1993).</b>					
		<b>H. Tsubomura, et al., "Dy sensitised zinc oxide:aqueous electrolyte:platinum photocell", Nature, vol. 261, pp. 402-403 (1976).</b>					
EXAMINER				DATE CONSIDERED			

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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U.S. PATENT DOCUMENTS							
*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
	5,986,206	11/1999	Kambe, et al.				
	6,217,843	04/2001	Homyonfer, et al.				
	6,270,571	08/2001	Iwasaki, et al.				
	3,783,325	01/1974	Shelton				
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	5,066,475	11/1991	Yoshinaka, et al.				
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	Christian Coddet et al., "Metallography: Growth of Crichites During Oxidation of Titanium or of the Alloy TA6V4 By Steam at High Temperature," C.R. Acad. Sc. Paris, t. 281, Series C, pp. 507-510 (September 29, 1975).
	Routkevitch et al., "Nonlithiographic Nano-Wire Arrays: Fabrication, Physics, and Device Applications," IEEE Trans. Elec. Dev. 43, No. 10, Oct. 1996, pp. 1646-1658.

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	Routkevitch, et al. "Porous Anodic Alumina Templates For Advances Nanofabrication," Electrochem Soc. Proc. 97-7, (1997) 350-357.
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	Masuda, Solid State Physics, 31, 5 (1996) 493-499.

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	6,525,461	02/2003	Iwasaki, et al.				
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6-89651	03/1994	Japan					
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913850 A1	05/1999	Europe					

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	Iwanaga, et al., "A Note on the Orientation of ZnO Ribbon Crystal," Japan J. Appl. Phys., Vol. 11, (1972) pp. 121-122.
	Kitano, et al., "Growth of Large Tetrapod-Like ZnO Crystals," Jpn. J. Crystl. Growth, Vol. 102 (1990) 965-973.
	Satoh, et al., "Epitaxial Growth of Zinc Oxide Whiskers by Chemical-Vapor Deposition Under Atmospheric Pressure," Jpn. J. Appl. Phys. Vol. 38 (1999) L 586-L589.
	Pan, et al., "Nanob Its of Semiconducting Oxid s," Sci nce, Vol. 291 (3-2001) 1947-1949.

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		<b>57-160174</b>	<b>10/1982</b>	<b>Japan</b>			
		<b>WO 98/39250</b>	<b>09/1998</b>	<b>PCT</b>			

OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)		
		<b>O'Regan, et al., "A low cost, high efficiency solar cell based on dye-sensitized colloidal TiO2 films," Nature, vol. 353, pages 737-740, October 24, 1991.</b>
		<b>Metal, (Feb. 1991) 89-93.</b>

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Sheet 5 of 5